

Claims

1. A method for generating charging information in a communication system, the method comprising:

providing a gateway with information regarding a time zone of a user equipment provided with network access by an access entity;

providing a service for the user equipment via the access entity and the gateway; and

generating charging information based on said information regarding the time zone for charging for the service.

2. A method according to claim 1, further comprising:

providing the user equipment with an access to the service through the access entity of a first network to the gateway of a second network, the service provided in the second network;

generating subscriber information comprising a time zone indication in the access entity of the first network;

transmitting the subscriber information from the access entity of the first network to the gateway of the second network; and

generating the charging information for charging for the service based on the time zone indication.

3. A method according to claim 1, further comprising:

verifying whether the service is providable for the user equipment based on said information regarding the time zone.

4. The method according to claim 3, wherein the verifying step comprises verifying if a subscriber of the user equipment is entitled to receive the service.

5. The method according to claim 4, further comprising providing the subscriber of the user equipment with a prepaid account and managing the prepaid account in connection with the gateway.

6. The method according to claim 5, wherein the verifying step comprises verifying if the prepaid account possesses enough prepaid resources for receiving the service.

7. A method according to claim 1, wherein the step of providing the user equipment with access to the service comprises providing a communication media from a visited network to a service provider located in a home network of the user equipment.

8. A method according to claim 1, further comprising:
generating said information regarding the time zone by mapping a Greenwich Mean Time time zone to a location of the user equipment.

9. A method according to claim 1, wherein the step of providing the gateway with the information regarding the time zone comprises sending the information from the access entity to the gateway.

10. A method according to claim 9, wherein sending the information comprises transmitting the information in a message of a packet data protocol context.

11. A method according to claim 1, wherein the step of providing the gateway with the information regarding the time zone comprises providing the gateway with the information for mapping an access entity address with the time zone for at least one access entity the gateway interfaces with.

12. A method according to claim 1, wherein the step of providing the gateway with the information regarding the time zone comprises providing the gateway with a table comprising information for mapping a user location received from the access entity with the time zone for at least one user location.

13. The method according to claim 1, further comprising pricing the service according to a function of a time of the day when the service is provided.

14. A communication system, comprising:
an access entity configured to provide network access for a user equipment and to provide information regarding a time zone;
a gateway configured to receive said information regarding the time zone; and
means for providing a service for the user equipment via the access entity and the gateway,
wherein the communication system is configured to use said information regarding the time zone in generating charging information for charging for the service.

15. A communication system according to claim 14, further comprising:
a first network comprising the access entity;
a second network configured to provide the service and comprising the gateway;
the access entity of the first network comprising subscriber information generating means configured to generate the subscriber information comprising a time zone indication and subscriber information transmitting means configured to transmit the subscriber information from the access entity to the gateway of the second network; and
charging information generating means configured to generate the charging information for charging for the service based on the time zone information.

16. A communication system according to claim 14, further comprising:

verifying means configured to verify whether the service is providable based on said information regarding the time zone.

17. A communication system according to claim 15, wherein the first network comprises a visited network and the second network comprises a home network relating to a subscriber of the user equipment.

18. A communication system according to claim 14, wherein the access entity comprises a serving general packet radio service support node and the gateway comprises a gateway general packet radio service support node.

19. A communication system according to claim 14, wherein a subscriber of the user equipment possesses a prepaid account to be used in charging the service.

20. An access entity configured to:
generate subscriber information comprising a time zone indication relating to a location of a user equipment in connection with the access entity;
and
transmit the subscriber information from the access entity to a gateway of another network.

21. A gateway configured to provide charging information using information regarding a time zone of a user equipment provided a network access by an access entity of another network.

22. A gateway configured for mapping with a time zone, the gateway comprising an access entity address that at least one access entity of another network the gateway interfaces with.

23. A gateway configured for mapping a user location received from an access entity of another network with a time zone.